	Division of Environmental Health and Communicable Disease Prevention	
	<b>Section: 4.0 Diseases and Conditions</b>	Revised 6/05
	Subsection: Varicella (Chickenpox) & Varicella deaths	Page 1 of 12

## **Varicella (Chickenpox)**

## **Varicella Death (Chickenpox)**

### **Varicella**

#### **Varicella Fact Sheet**

**(CDC – General Questions)**

**(CDC – Clinical Questions)**

**Disease Case Report (CD-1)**

**PDF format**


**Word format**

**Missouri Outbreak Surveillance Form (CD-51)**

**Varicella Surveillance Worksheet (CDC form)**

**Varicella-Death Investigation Worksheet (CDC form)**

**Sample Letter to Parents and Caregivers Informing Them of Outbreak  
& Vaccine Availability**

	Division of Environmental Health and Communicable Disease Prevention	
	<b>Section: 4.0 Diseases and Conditions</b>	Revised 6/05
	Subsection: Varicella (Chickenpox) & Varicella deaths	Page 2 of 12

## Varicella (Chickenpox)

## Varicella Death (Chickenpox)

### Overview<sup>(1,2,5,6)</sup>

Humans are the only known reservoir for varicella-zoster virus, which causes two distinct clinical diseases. Varicella (chickenpox) is the primary infection and results from exposure of a person susceptible to the virus. Recurrences of infection (shingles) result in a more localized phenomenon known as *herpes zoster*, a common infection among the elderly.


The medical significance of varicella-zoster (chickenpox) should be stressed, in that there have been approximately 250 deaths per year in the United States, even with the availability of the chickenpox vaccine since 1995<sup>(5)</sup>. Before the availability of varicella vaccine in the United States, almost everyone developed varicella. Thus the cases approximated the birth cohort over time, resulting in an estimated 4 million cases of varicella with approximately 11,000 hospitalizations in the early 1990s. For the healthy child, chickenpox mortality is less than 2 per 100,000 cases. The risk increases by more than 15-fold for adults.

Chickenpox is an acute viral infectious disease that ordinarily manifests as a generalized pruritic (itching), maculopapular rash typically consisting of 250 to 500 lesions with malaise and fever up to 102°F for 2 to 3 days. The incubation period is from 14 to 16 days from exposure, with a range of 10 to 21 days. The rash usually appears first on the scalp, followed by the trunk, and then the extremities, with the highest concentration of lesions on the trunk (centripetal distribution). The unilocular rash rapidly progresses from macules to papules to vesicular lesions before crusting. Successive crops of lesions appear across several days, with lesions present in several stages of development (a non-synchronous rash).

Chickenpox is spread by coughing and sneezing (highly contagious). The varicella vaccine is a live-attenuated preparation of the serially propagated and attenuated wild Oka strain. The product contains trace amounts of neomycin and gelatin. The vaccine is licensed for use in healthy people 12 months of age or older who are susceptible to varicella disease.

For a complete description of *Varicella (Chickenpox)*, refer to the following texts:

- *Control of Communicable Diseases Manual*. (CCDM), American Public Health Association. 18th ed. 2004.
- American Academy of Pediatrics. *Red Book: 2003 Report of the Committee on Infectious Diseases*. 26th ed. 2003.
- Centers for Disease Control and Prevention. *Epidemiology and Prevention of Vaccine-Preventable Diseases*. 8th ed. 2004.
- *Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases*. 6<sup>th</sup> ed. 2005.

	Division of Environmental Health and Communicable Disease Prevention	
	<b>Section: 4.0 Diseases and Conditions</b>	Revised 6/05
	Subsection: Varicella (Chickenpox) & Varicella deaths	Page 3 of 12

## **Case Definitions<sup>(3)</sup>**

### ***Clinical description***

An illness with acute onset of diffuse (generalized) maculo-papulovesicular rash without other apparent cause.

### ***Laboratory criteria for diagnosis***

- Isolation of varicella virus from a clinical specimen, or
- Direct fluorescent antibody (DFA), or
- Polymerase chain reaction (PCR), or
- Significant rise in serum varicella immunoglobulin G (IgG) antibody level by any standard serologic assay

### ***Case classification - Varicella (Chickenpox)***

***Confirmed:*** a case that is laboratory confirmed or that meets the clinical case definition and is epidemiologically linked to a confirmed or probable case.

***Probable:*** a case that meets the clinical case definition is not laboratory confirmed and is not epidemiologically linked to another probable or confirmed case.

### ***Case classification - Varicella-Deaths***

***Confirmed:*** A confirmed case of varicella, which contributes directly or indirectly to acute medical complications, which result in death.

***Probable:*** A probable case of varicella, which contributes directly or indirectly to acute medical complications, which result in death.


### ***Comments:***

Two probable cases that are epidemiologically linked would be considered confirmed, even in the absence of laboratory confirmation. In vaccinated persons who develop varicella more than 42 days after vaccination (breakthrough disease), the disease is almost always mild with fewer than 50 skin lesions and shorter duration of illness. The rash may also be atypical in appearance (maculopapular with few or no vesicles).

Laboratory confirmation of cases of varicella is not routinely recommended; laboratory confirmation is recommended for fatal cases (***Varicella-Deaths***) and in other special circumstances.

## **Information Needed for Varicella Investigation**

**Verify clinical diagnosis.** What laboratory tests were conducted? What were the results? What are the patient's clinical symptoms? Was the patient vaccinated for chickenpox? Is varicella included among hospital discharge diagnosis data? Is varicella included as cause of death or a contributing condition on death certificate?

	Division of Environmental Health and Communicable Disease Prevention	
	<b>Section: 4.0 Diseases and Conditions</b>	Revised 6/05
	Subsection: Varicella (Chickenpox) & Varicella deaths	Page 4 of 12

**Establish the extent of illness.** Determine if household or other close contacts at high risk for exposure or transmission (e.g., teachers and staff in child care, school, or institutional settings; health-care workers; family members of immunocompromised persons) are, or have been, ill by contacting the health-care provider, patient or family member.


### **Notification and Control Measures**

- Contact the Regional Communicable Disease Coordinator, or the Department of Health and Senior Services' Situation Room (DSR) at 800-392-0272 (24/7) immediately upon learning of a suspected outbreak of varicella disease.
- Contact the Bureau of Child Care (573-751-2450) if cases are associated with a child care facility.
- Contact the Section for Long-Term Care Regulation (573-526-0721) if cases are associated with a long-term care facility.
- Contact the Bureau of Health Facility Regulation (573-751-6303) if cases are associated with a hospital or hospital-based long-term care facility.

### **Control Measures**<sup>(2)</sup>

Universal immunization of infants, susceptible older children and adolescents without contraindications is recommended. Varicella virus vaccine is recommended for all children without contraindications at 12–18 months of age. The vaccine may be given to all children at this age regardless of prior history of varicella. However, vaccination is not necessary for children with reliable histories of chickenpox, including children who developed chickenpox before the first birthday.

- **Age 12 months to 13<sup>th</sup> birthday:** One dose of varicella vaccine is recommended for immunization of all immunocompetent children who lack a reliable history or serologic evidence of varicella. Varicella vaccine may be given any time during childhood but is recommended before the 13<sup>th</sup> birthday because of the potential increased severity of natural varicella after this age.
- **Healthy adolescents and young adults:** Healthy adolescents past their 13<sup>th</sup> birthday who are susceptible should be immunized against varicella by administration of 2 doses of vaccine 4 to 8 weeks apart.
- **Adults:** Immunization is recommended by the Advisory Committee on Immunization Practices (ACIP) for the following high-risk groups; however, varicella immunization of all susceptible adults is encouraged:
  - o Close contacts of people at high risk for serious complications, including family contacts of immunocompromised people.
  - o Health-care workers, teachers of young children, child care workers, residents or staff members in institutional settings, college students, inmates or staff members of correctional institutions, members of the military, or international travelers.
  - o **Non-pregnant** women of childbearing age. (Pregnant women should not receive the varicella vaccine.)

	Division of Environmental Health and Communicable Disease Prevention	
	<b>Section: 4.0 Diseases and Conditions</b>	Revised 6/05
	Subsection: Varicella (Chickenpox) & Varicella deaths	Page 5 of 12

- o Adolescents and adults living in households with children.

Varicella vaccine should be administered subcutaneously. It has been shown to be safe and effective in healthy children when administered at the same time as measles-mumps-rubella (MMR) vaccine, at separate sites and with separate syringes. If varicella and MMR vaccines are not administered at the same visit, they should be separated by at least 28 days. Varicella vaccine may also be administered simultaneously (but at separate sites with separate syringes) as all other childhood vaccines. The ACIP strongly recommends that varicella vaccine be administered simultaneously with all other vaccines recommended at 12–18 months of age.

#### **Contraindications & Precautions<sup>(2)</sup>:**


- Varicella vaccine should not be administered to people with allergies to vaccine components<sup>(6)</sup>.
- Varicella vaccine should not be administered to people who have moderate or severe illnesses with or without fever. Vaccination should be postponed until recovery.
- Varicella vaccine should not be routinely administered to persons who have altered immunity from a malignant condition, including blood dyscrasias, leukemia, lymphomas of any type, or other malignant neoplasms affecting the bone marrow or lymphatic systems<sup>(6)</sup>.
- Varicella vaccine should not be administered to people who are receiving high doses of systemic corticosteroids (see *Red Book* for more details).
- Varicella vaccine should not be administered to pregnant women.
- Immunized people in whom a rash develops should avoid direct contact with immunocompromised susceptible hosts for the duration of the rash.
- See table titled “Suggested intervals between administration of immune globulin preparations for different indications and measles-containing vaccine and varicella vaccine<sup>(4)</sup>” from ACIP “General Recommendations on Immunizations” February 8, 2002, Appendix A5 in the *Epidemiology and Prevention of Vaccine-Preventable Diseases*. 8th ed. 2004. [http://www.cdc.gov/nip/publications/pink/appendices/A/mmr\\_ig.pdf](http://www.cdc.gov/nip/publications/pink/appendices/A/mmr_ig.pdf) (6/05)

**Note:** Avoid the use of salicylates for 6 weeks after receiving varicella vaccine because of the association between aspirin and Reye syndrome following varicella disease<sup>(6)</sup>.

#### **Control Measures** (continued)

##### **Child Care and School**<sup>(2)</sup>

Children with uncomplicated chickenpox who have been excluded from school or child care may return when the rash has crusted, which may be several days in mild cases and several weeks in severe cases or in the immunocompromised children.

	Division of Environmental Health and Communicable Disease Prevention	
	<b>Section: 4.0 Diseases and Conditions</b>	Revised 6/05
	Subsection: Varicella (Chickenpox) & Varicella deaths	Page 6 of 12

Exclusion of children with zoster whose lesions cannot be covered is based on similar criteria. Children who are excluded may return after the lesions have crusted. Lesions that are covered seem to pose little risk to susceptible people. Older children and staff with zoster should be instructed to wash their hands if they touch potentially infectious lesions.


In outbreaks involving child care and/or schools, unvaccinated children with no history of varicella should be instructed to be vaccinated immediately or excluded for the duration of the period of communicability (i.e., from 10-21 days post-exposure or for the duration of the outbreak).

For outbreaks in child care or preschool settings, the minimum public health response should include informing parents, caregivers, and contacts of the occurrence of the outbreak, providing them with information on varicella and its potential to cause severe complications, and providing information about the availability of the vaccine. A sample letter is available [http://www.cdc.gov/nip/publications/surv-manual/app21\\_var\\_ltr.pdf](http://www.cdc.gov/nip/publications/surv-manual/app21_var_ltr.pdf). (6/05)

### **Outbreak Investigation**<sup>(6)</sup>

#### **Steps for Investigation and Control of Varicella Outbreaks**

<b>Step</b>	<b>Description and Details</b>
<b>1.</b>	<b>Confirm outbreak, investigate all persons exposed in the outbreak, and determine varicella susceptibility.</b> <ol style="list-style-type: none"> <li>Define cases and confirm outbreak.</li> <li>Screen outbreak cohort for susceptibility to varicella. <ol style="list-style-type: none"> <li>Use history of disease and vaccination.</li> <li>Use serologic testing.</li> </ol> </li> <li>Investigate cases to characterize illness including onset, severity, duration, pre-existing medical conditions and medications, and complications.</li> </ol>
<b>2.</b>	<b>Initiate outbreak control and treat cases (if appropriate).</b> <ol style="list-style-type: none"> <li>Isolate or cohort infective cases.</li> <li>Exclude non-vaccinated persons without history of disease from school or contact with children.</li> <li>Recommend treatment of active cases with antiviral therapy (adolescents and adults only).</li> <li>Offer vaccine to susceptible persons. <ol style="list-style-type: none"> <li>Distribute letters recommending vaccination.</li> <li>Offer vaccine through on-site clinics.</li> </ol> </li> <li>Offer VZIG to exposed, susceptible persons at high risk of severe disease.</li> </ol>
<b>3.</b>	<b>Establish surveillance for:</b> <ol style="list-style-type: none"> <li>Additional varicella cases (<i>Note: If cases continue despite recommendation 2.d.ii, consider a vaccination clinic.</i>)</li> <li>Vaccine-associated adverse events.</li> </ol>

	Division of Environmental Health and Communicable Disease Prevention	
	<b>Section: 4.0 Diseases and Conditions</b>	Revised 6/05
	Subsection: Varicella (Chickenpox) & Varicella deaths	Page 7 of 12

Step	Description and Details
<b>4.</b>	<b>Analyze collected data.</b> <ol style="list-style-type: none"> <li>Describe cases and transmission (date of rash onset, age, sex, country of birth, severity, etc.).</li> <li>Describe serological status (if serology testing performed).</li> <li>Evaluate outbreak control efforts.</li> <li>Calculate vaccine effectiveness.</li> </ol>
<b>5.</b>	<b>Investigate low vaccine effectiveness (if present).</b>

### **Exposed People**<sup>(2)</sup>


Potential interventions for susceptible people exposed to varicella include either VZIG (1 dose up to 96 hours after exposure) or varicella vaccine (1 dose up to 72 hours after exposure). If varicella vaccine is administered to susceptible children within 72 hours and possibly up to 120 hours following varicella exposure, varicella vaccine may prevent or significantly modify disease. The decision to administer VZIG depends on 3 factors (1) the likelihood that the exposed person is susceptible to varicella; (2) the probability that a given exposure to varicella or zoster will result in infection; and (3) the likelihood that complications of varicella will develop if the person is infected. See *Red Book*, Table 3.76 Types of Exposure to Varicella or Zoster for which VZIG is Indicated for Susceptible People, and Table 3.77 Candidates for VZIG, Provided Significant Exposure Has Occurred; pp. 678-679, to evaluate what interventions are warranted. Varicella zoster immune globulin can be ordered from the distributor, FFF Enterprises, Inc., Temecula, CA, at 800-843-7477.

### **Hospital Exposure**<sup>(2)</sup>

If an inadvertent exposure in a hospital to an infected patient, health care provider, or visitor occurs (see the *Red Book* page 677).

### **Control Measures** (For detailed information see):

- *Control of Communicable Diseases Manual*. (CCDM), American Public Health Association. 18th ed. 2004.
- American Academy of Pediatrics. *Red Book: 2003 Report of the Committee on Infectious Diseases*. 26th ed. 2003.
- Centers for Disease Control and Prevention. *Epidemiology and Prevention of Vaccine-Preventable Diseases*. 8th ed. 2004.
- *Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases*. 6<sup>th</sup> ed. 2005.
- Centers for Disease Control and Prevention. *Manual for the Surveillance of Vaccine-Preventable Diseases*. 3<sup>rd</sup> ed. 2002.

	Division of Environmental Health and Communicable Disease Prevention	
	<b>Section: 4.0 Diseases and Conditions</b>	Revised 6/05
	Subsection: Varicella (Chickenpox) & Varicella deaths	Page 8 of 12


## **Laboratory Procedures**

Laboratory testing for varicella is not routinely required but is indicated to confirm the diagnosis in severe or unusual cases or to determine varicella susceptibility. Diagnostic tests used to confirm recent varicella infection include virus isolation and identification, in addition to serologic tests. The Missouri State Public Health Laboratory routinely tests for VZV using vesicular lesion specimens for PCR and virus culture. Virus isolation collection and transport kits are available by calling 573-751-0633, 8 a.m. – 5 p.m., Monday through Friday.

## **Reporting Requirements**

**Varicella (chickenpox) / Varicella-Death** are a Category II disease and shall be reported to the local health authority or to the Missouri Department of Health and Senior Services (DHSS) within 72 hours of first knowledge or suspicion by telephone, facsimile or other rapid communication. **DHSS may be contacted 24 hours a day, 7 days a week at 800-392-0272.**


1. For varicella (chickenpox) case reports complete a DHSS “Disease Case Report” ([CD-1](#)), following the directions provided on the back of the CD-1.
2. The abbreviated information collected on the CD-1 should be entered into the Web Surveillance application [after 6/1/05, unless some other special circumstance exists]. The entry of the CD-1 into the Web Surveillance application negates the need for the paper CD-1 to be forwarded to the Regional Health Office.  
**Note:** Varicella case reports of special circumstance {see item 5} require entry into MOHSIS.
3. Incomplete CD-1 information on varicella (chickenpox) does not necessarily require an investigation to collect the missing information, unless some other special circumstance exists {see item 5}. Disease Case Reports (CD-1) with enough information provided to determine a case status “*confirmed*” or “*probable*” are to be entered into the Web Surveillance Application. Cases not meeting “*confirmed*” or “*probable*” status are to be considered “*suspect*” cases. If severity of illness is not documented without accompanying lab work to confirm the case, the case is considered “*suspect*”.
4. “*Suspect*” varicella cases are not entered into MOHSIS or the Web Surveillance application. The Disease Case Report (CD-1) on “*suspect*” varicella cases should be forwarded to the Section for Communicable Disease Prevention, 930 Wildwood PO Box 570, Jefferson City, MO 65102 for retention.
5. Investigation of a varicella (chickenpox) case is warranted for all deaths associated with varicella, outbreaks involving exposure of potentially susceptible persons at high risk for serious complications of varicella, or documentation of severe complications such as invasive Group A streptococcal infections.
6. For all varicella-deaths, in addition to the CD-1, complete the “Varicella-Death Investigation Worksheet”. This worksheet can be found at:  
[http://www.cdc.gov/nip/diseases/varicella/varicella\\_death\\_invst\\_wksht.pdf](http://www.cdc.gov/nip/diseases/varicella/varicella_death_invst_wksht.pdf) (6/05).

	Division of Environmental Health and Communicable Disease Prevention	
	<b>Section: 4.0 Diseases and Conditions</b>	Revised 6/05
	Subsection: Varicella (Chickenpox) & Varicella deaths	Page 9 of 12

7. Cases requiring the completion of the “Varicella-Death Surveillance Worksheet” should be entered into MOHSIS, with the worksheet being forwarded to the Regional Health Office.
8. For the circumstances listed above in {item 5}, other than death, complete a “Varicella Surveillance Worksheet” on the case. This worksheet can be found at: [http://www.cdc.gov/nip/diseases/varicella/varicella\\_surv\\_wksht.pdf](http://www.cdc.gov/nip/diseases/varicella/varicella_surv_wksht.pdf). (6/05)
9. Cases requiring the completion of the “Varicella Surveillance Worksheet” should be entered into MOHSIS, with the worksheet being forwarded to the Regional Health Office.
10. All outbreaks or “suspected” outbreaks of chickenpox must be reported as soon as possible (by phone, fax or e-mail) to the Regional Communicable Disease Coordinator using the Missouri Outbreak Surveillance Report (CD-51).
11. Within 90 days from the conclusion of an outbreak, submit the final outbreak report to the Regional Communicable Disease Coordinator. All outbreaks of vaccine-preventable disease should be investigated. A systematic approach to investigation and control of outbreaks includes confirming the outbreak, identifying susceptible persons, offering vaccine, establishing surveillance, analyzing data, and using data to make recommendations. The information gathered helps us understand whether the outbreak occurred because of failure to vaccinate, or failure of the vaccine. Occasionally, multiple varicella outbreaks could occur. The following table can be used to prioritize your outbreak response efforts.

**Varicella Outbreaks: Priorities for Investigation<sup>(6)</sup>**

Priority	Outbreak Description
<b>1</b>	Outbreaks among patients and staff in health-care settings.
<b>2</b>	Outbreaks associated with severe complications (e.g., pneumonia, encephalitis, serious infectious complications such as invasive Group A streptococcal infection or hemorrhagic complications) and/or hospitalizations.
<b>3</b>	Outbreaks among persons who are immunocompromised due to HIV infection, cancer, or immunosuppressive therapy.
<b>4</b>	Outbreaks involving adolescents <u>and</u> adults.
<b>5</b>	Outbreaks occurring among vaccinated populations.
<b>6</b>	Clusters of reports (may suggest improper storage and handling of vaccine).
<b>7</b>	Outbreaks involving a large number of cases.

	Division of Environmental Health and Communicable Disease Prevention	
	<b>Section: 4.0 Diseases and Conditions</b>	Revised 6/05
	Subsection: Varicella (Chickenpox) & Varicella deaths	Page 10 of 12

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2. American Academy of Pediatrics. Varicella-Zoster Infections. In: Pickering LK, ed. *Red Book: 2003 Report of the Committee on Infectious Diseases*. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003:672-686.
3. Centers for Disease Control and Prevention. Epidemiology Program Office, Division of Public Health Surveillance and Informatics, *Nationally Notifiable Infectious Diseases United States 2005*. <http://www.cdc.gov/epo/dphsi/phs/infdis.htm> (6/05)
4. Centers for Disease Control and Prevention. Varicella. In: Atkinson W, Hamborsky J, Wolfe C, eds. *Epidemiology and Prevention of Vaccine-Preventable Diseases*. 8<sup>th</sup> ed. Washington, D.C.: Public Health Foundation; 2004:159-175 and A-5.  
<http://www.cdc.gov/nip/publications/pink/varicella.pdf> (6/05)  
[http://www.cdc.gov/nip/publications/pink/appendices/A/mmr\\_ig.pdf](http://www.cdc.gov/nip/publications/pink/appendices/A/mmr_ig.pdf) (6/05)
5. Whitley, RJ. Varicella-Zoster Virus. In: Mandell GL, Bennett JE, Dolin R, eds. *Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases*. 6<sup>th</sup> ed. Philadelphia, Pa.: Elsevier Churchill Livingstone; 2005: vol.2:1780-1786.
6. Jumaan A, et al. Varicella. In: Wharton M, Hughes H, Reilly M, eds. *Manual for the Surveillance of Vaccine-Preventable Diseases*. 3<sup>rd</sup> ed. Atlanta, Ga.: Centers for Disease Control and Prevention; 2002. [http://www.cdc.gov/nip/publications/surv-manual/chpt14\\_varicella.pdf](http://www.cdc.gov/nip/publications/surv-manual/chpt14_varicella.pdf) (6/05)

## **Other Sources of Information**

1. The Blue Book: *Guidelines for the Control of Infectious Diseases*: “Chicken pox/Herpes zoster” 24 May 2004.  
[http://www.health.vic.gov.au/ideas/bluebook/chicken\\_pox.htm](http://www.health.vic.gov.au/ideas/bluebook/chicken_pox.htm) (6/05)
2. Infection Control in the Child Care Center and Preschool. “Chickenpox.” Donowitz, 4th Edition, 1999: 308-314.

## MISSOURI OUTBREAK SURVEILLANCE FORM

ID: \_\_\_\_\_ OUTBREAK NAME: \_\_\_\_\_ ENTRY DATE: \_\_\_\_\_

PERSON RECEIVING REPORT: \_\_\_\_\_

REPORT DATE: \_\_\_\_\_

**REPORTED BY: (check 2-digit code)**

- |                                  |                                |   |
|----------------------------------|--------------------------------|---|
| 01 Local Health Dept             | 05 Nursing Home/Long Term Care | 09 Private Physician/health care Provider |
| 02 Regional Office               | 06 Child Care                  | 10 Private Citizen                        |
| 03 Hospital                      | 07 School/College              | 11 Other State Agency                     |
| 04 Laboratory (non-hospital lab) | 08 Industry Worksite           | 12 Other, specify _____                   |

DATE OF REPORT TO LOCAL HEALTH AGENCY: \_\_\_\_\_

**EVENT DESCRIPTION: (circle 2-digit code)**

- |                                  |                           |                         |
|----------------------------------|---------------------------|-------------------------|
| 01 Outbreak or possible outbreak | 04 Cluster of Events      | 07 Other, specify _____ |
| 02 Case Report                   | 05 Sensitive Event        |                         |
| 03 Toxic Exposure                | 06 Artifact (false alarm) |                         |

CRITICAL EVENT DATE: \_\_\_\_\_

Number of persons reported ill: \_\_\_\_\_

Number of persons hospitalized: \_\_\_\_\_

Number of reported deaths: \_\_\_\_\_

Estimated number of persons exposed/at risk: \_\_\_\_\_

**SUSPECTED LOCATION OF EXPOSURE:**

In state \_\_\_\_ Out of State ☐ Out of Country ☐

County: \_\_\_\_\_ State: \_\_\_\_\_ Country: \_\_\_\_\_

**GENERAL CATEGORY: (circle 2-digit code)**

- |   |   |
|---|---|
| 01 Infectious Disease                     | 05 Environmental Hazard (noninfectious) |
| 02 Special Syndrome (Reye, Kawasaki, GBS) | 06 Occupational Hazard (noninfectious)  |
| 03 Injury/Trauma                          | 08 Other, specify: _____                |
| 04 Chronic Disease                        | 09 Unknown                              |

**SUSPECT MODE OF TRANSMISSION: (circle 2-digit code)**

- |           |                                 |                           |
|-----------|---------------------------------|---------------------------|
| 01 Food   | 04 Air                          | 07 Environmental Exposure |
| 02 Water  | 05 Person-to-person             | 08 Worksite Exposure      |
| 03 Vector | 06 Medical Procedure/Medication | 09 Other, specify: _____  |

What is the specific suspect vehicle (product) or vector?

**EXPOSURE SETTING/POPULATION AT RISK: (circle 2-digit code)**

- |                                   |                            |   |
|-----------------------------------|----------------------------|---|
| 01 Camp                           | 09 Immigrant/Alien         | 18 Institution/Prison   |
| 02 Childcare                      | 10 Military Base/Camp      | 19 Healthcare Facility/Hospital/<br>Clinic/Medical Care Site/<br>Nursing/Long Term Care |
| 03 Church/Temple                  | 12 Occupational/Workplace  |   |
| 04 Club/Health Spa                | <b>14 Resort/Hotel</b>     |   |
| 05 Disaster (natural or man-made) | 15 Restaurant/Food Service | 88 Other, specify   |
| 06 General Community              | 16 School/College          | 99 Unknown  |
| 07 Home/Private Gathering         | 17 Catered Event           |   |

**SPECIFIC CAUSE: (circle 3-digit code)**

- |  |                              |                                 |
|--|------------------------------|---------------------------------|
| 151 AGI*   | 048 Hepatitis, NANB          | 103 Reye Syndrome               |
| 056 AIDS   | 012 Hepatitis (unspecified)  | 105 Rheumatic Fever             |
| 104 Amebiasis                                    | 106 Influenza                | 025 Rocky Mtn Spotted Fever     |
| 217 ARI**  | 049 Legionellosis            | 020 Rubella                     |
| 001 Aseptic Meningitis                           | 038 Hansen Disease (Leprosy) | 100 Salmonella, serotype: _____ |
| 152 Bacillus Cerus                               | 039 Leptospirosis            | 225 Scabies                     |
| 053 Botulism, foodborne                          | 158 Listeriosis              | 160 Scombrototoxin              |
| 002 Brucellosis                                  | 108 Lyme disease             | 101 Shigellosis                 |
| 102 Campylobacteriosis                           | 013 Malaria                  | 200 Silicosis                   |
| 003 Chickenpox                                   | 050 Measles (indigenous)     | 161 S. Aureus                   |
| 153 Ciguatoxin                                   | 051 Measles (imported)       | 219 S. Aureus - MRSA***         |
| 154 C. perfringens                               | 016 Meningococcal infection  | 162 Strep group A               |
| 155 Cryptosporidiosis                            | 018 Mumps                    | 032 Syphilis                    |
| 004 Diphtheria                                   | 555 Norwalk-Like Virus       | 021 Tetanus                     |
| 156 E. coli O157:H7                              | 019 Pertussis                | 052 Toxic Shock Syndrome        |
| 005 Encephalitis, primary                        | 044 Plague                   | 027 Trichinosis                 |
| 218 Fifth Disease                                | 041 Polio, (paralytic)       | 022 Tuberculosis                |
| 157 Giardiasis                                   | 045 Psittacosis              | 023 Tularemia                   |
| 029 Gonorrhea                                    | 159 Pseudomonas              | 024 Typhoid Fever               |
| 011 Hepatitis A                                  | 034 Rabies (animal)          | 026 Typhus (murine)             |
| 010 Hepatitis B                                  | 046 Rabies (human)           | 047 V. cholerae - 01            |
| 777 Environmental hazard or toxin: specify _____ |                              | 226 V. cholerae non-01          |
| 888 Other, specify _____                         |                              | 163 V. parahaemolyticus         |

**999 Unknown****\*Acute Gastrointestinal Illness of unknown etiology****\*\*Acute Respiratory Illness of unknown etiology****\*\*\*Methicillin Resistant S. aureus****LEVEL OF INVESTIGATION BY LOCAL AGENCY:**

- |  |   |                                |
|--|---|--------------------------------|
| 01 Received report                           | 04 Onsite visit or assistance               | 06 Referred to Regional office |
| 02 Handled by other person/office/agency     | 05 Primary responsibility for investigation |                                |
| 03 Consultation is provided by phone or mail | Responsible agency: _____                   |                                |

SHADED AREAS TO BE COMPLETED BY REGIONAL OFFICE

**LEVEL OF INVESTIGATION****REGION: \_\_\_\_\_**

- |  |   |   |
|--|---|---|
| 01 Received report                       | 03 Consultation provided by phone or mail | 05 Primary responsibility for investigation |
| 02 Handled by other person/office/agency | 04 Onsite visit or assistance             | 06 OTHER: _____                             |

**STATUS OF REPORT: Check one:**Provisional ☐Administratively Closed ☐Final\* ☐**Comments:**

Form completed by: \_\_\_\_\_ Date: \_\_\_\_\_

\*A summary/writeup must be included.

Revised 12/03